



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-5B6/2
 UNIQUE ID NUMBER: 2CM019
 COMBUSTOR: DAC
 ENGINE TYPE: TF

BYPASS RATIO: 5.7
 PRESSURE RATIO (π_{00}): 24.8
 RATED THRUST (F_{00}) (kN): 104.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	6.7	110.6	31.7	4.0
AS % OF ORIGINAL LIMIT	34.0	93.7	35.4	17.1
AS % OF CAEP/2 LIMIT (NO _x)			44.2	
AS % OF CAEP/4 LIMIT (NO _x)			54.0	
AS % OF CAEP/6 LIMIT (NO _x)			61.4	
AS % OF CAEP/8 LIMIT (NO _x)			74.1	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.998	0.10	4.48	13.51	0.5
CLIMB OUT	85	2.2	0.827	0.20	12.18	10.41	0.5
APPROACH	30	4.0	0.315	0.20	17.75	10.32	3.8
IDLE	7	26.0	0.111	3.40	46.10	3.90	3.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			400	630	10842	3158	-
NUMBER OF ENGINES				4	4	4	4
NUMBER OF TESTS				9	9	9	9
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.8	103.4	30.2	3.7
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				4.58-8.45	97.66-109.78	29.37-31.42	3.1-4.2

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.3-101
TEMPERATURE (K)	288-298
ABS HUMIDITY (kg/kg)	0.01-0.0146

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	18.1

MANUFACTURER: CFM International
 TEST ORGANIZATION: SNECMA, Villaroche, France
 TEST LOCATION: Techspace Aero, Liege, Belgium
 TEST DATES: 19/06/1995-28/07/1995

REMARKS

1. Ref GE Report CR-797/2 Supplement 1.
2. Engine S/N 779172/001, 779174/001, 779175/001, & 779178/001
3. DAC combustor

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)